POTASH STATISTICS

By David A. Buckingham and James P. Searls

[All values are in metric tons (t) K₂O unless otherwise noted]

Last modification: March 23, 2005

Estimated or

					Estimated or			
					reported	Estimated	Estimated	Reported
	Reported	Reported	Reported	Reported	apparent	unit value	unit value	world
Year	production	imports	exports	stocks	consumption	(\$/t)	(98\$/t)	production
1900	877	77,000			77,900	65.70	1,290	
1901		54,400			54,400	72.20	1,420	
1902		18,300			18,300	55.50	1,050	
1903		12,900			12,900	60.10	1,090	
1904		73,500			73,500	72.40	1,320	
1905	411	125,000			125,000	76.20	1,380	
1906		27,200			27,200	65.80	1,200	
1907		28,100			28,100	89.80	1,580	
1908		26,800			26,800	54.60	993	
1909		152,000			152,000	72.30	1,310	
1910		318,000			318,000	58.20	1,020	
1911		321,000			321,000	64.10	1,120	
1912		301,000			301,000	63.70	1,080	
1913		241,000			241,000	61.10	1,010	
1914		179,000			179,000	63.30	1,030	
1915	989	40,900			41,800	91.40	1,470	
1916	8,820	3,850			12,700	501	7,490	
1917	29,600	2,300			31,900	468	5,970	
1918	35,000	1,930		14,700	36,900	458	4,950	
1919	41,500	32,900		11,430	74,300	227	2,140	122,000
1920	37,600	192,000		8,160	229,000	192	1,560	224,000
1921	4,000	66,400		11,500	70,400	131	1,190	994,000
1922	10,300	179,000		10,600	189,000	63.40	615	1,400,000
1923	17,500	185,000	1,410	11,200	201,000	64.00	610	1,250,000
1924	19,800	178,000	690	9,770	202,000	60.30	575	1,100,000
1925	23,400	227,000	840	9,320	258,000	61.00	568	1,590,000
1926	22,700	242,000		8,170	264,000	73.80	680	1,710,000
1927	44,900	221,000		2,270	249,000	78.20	732	2,000,000
1928	54,800	300,000		1,910	355,000	72.10	687	2,030,000
1929	52,200	295,000		5,630	347,000	76.90	733	2,200,000
1930	51,400	311,000		9,980	354,000	75.90	741 831	2,050,000
1931	57,900			9,530			849	1,400,000
1932 1933	50,500			25,400	152,000	71.30 60.70	760	1,250,000
1933	126,000	156,000 156,000		19,000	266,000	55.60	676	1,670,000
1934	104,000			45,400	249,000	41.40	493	1,980,000
	204,000	219,000 192,000		16,300	423,000	48.90	573	2,270,000
1936 1937	202,000 242,000	319,000	56,200	30,800 50,500	394,000 504,000	48.90	560	2,310,000 2,820,000
1937	260,000	176,000	47,000		388,000	51.90	600	3,010,000
1938	332,000	90,800	76,000		347,000	43.00	504	2,730,000
1939	357,000	108,000	57,000	14,900	407,000	34.10	397	2,730,000
1940	482,000	14,400	51,600	8,810	445,000	39.40	437	3,210,000
1941	618,000	3,950	44,600		577,000	33.60	336	3,170,000
1942	664,000	15,500	63,500	12,700	616,000	33.30	314	3,270,000
1943	742,000	4,360	62,500		684,000	36.90	342	3,040,000
1945	790,000	5,460	61,300		734,000	36.80	333	1,910,000
-								2,310,000
								2,620,000
								2,940,000
1946 1947 1948	842,000 956,000 1,040,000	3,960	59,600 61,800 63,300	34,500	787,000 917,000 999,000	33.70 31.10 30.80	282 227 208	2,3 2,6

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					reported	Estimated	Estimated	Reported
	Reported	Reported	Reported	Reported	apparent	unit value	unit value	world
Year	production	imports	exports	stocks	consumption	(\$/t)	(98\$/t)	production
1949	1,020,000	17,400	63,100	8,230	971,000	31.30	214	2,540,000
1950	1,160,000	182,000	59,000		1,280,000	41.70	282	3,130,000
1951	1,280,000	285,000	62,300	29,300	1,500,000	41.30	259	5,080,000
1952	1,450,000	171,000	51,100	89,100	1,570,000	43.10	265	5,620,000
1953	1,570,000	121,000	44,500	253,000	1,650,000	43.40	265	5,900,000
1954	1,740,000	108,000	59,900	283,000	1,790,000	41.80	253	6,620,000
1955	1,820,000	161,000	118,000	337,000	1,860,000	42.30	257	7,260,000
1956	1,910,000	164,000	205,000	399,000	1,870,000	41.20	247	7,530,000
1957	1,940,000	165,000	212,000	508,000	1,890,000	39.20	227	7,890,000
1958	2,120,000	181,000	230,000	337,000	2,070,000	36.80	208	7,980,000
1959	2,250,000	212,000	306,000	251,000	2,150,000	37.70	211	8,530,000
1960	2,360,000	205,000	445,000	282,000	2,120,000	36.70	202	9,070,000
1961	2,260,000	238,000	429,000	506,000	2,060,000	38.90	212	9,710,000
1962	2,470,000	309,000	459,000	259,000	2,320,000	41.70	225	9,800,000
1963	2,460,000	539,000	386,000	434,000	2,610,000	41.90	223	11,300,000
1964	2,760,000	669,000	561,000	268,000	2,870,000	41.30	217	12,300,000
1965	2,660,000	1,010,000	588,000		3,080,000	42.70	221	13,700,000
1966	2,840,000	1,350,000	564,000	626,000	3,630,000	41.30	208	14,600,000
1967	2,840,000	1,540,000	629,000	783,000	3,790,000	34.10	166	15,700,000
1968	2,640,000	1,960,000	679,000	613,000	3,940,000	28.00	131	16,200,000
1969	2,780,000	2,120,000	643,000	356,000	4,260,000	23.70	105	17,400,000
1970	2,420,000	2,360,000	519,000	412,000	4,290,000	35.20	148	18,200,000
1971	2,350,000	2,510,000	523,000	388,000	4,350,000	39.60	159	19,900,000
1972	2,380,000	2,690,000	705,000	425,000	4,370,000	39.40	154	20,000,000
1973	2,600,000	3,250,000	821,000	187,000	5,050,000	39.90	146	18,900,000
1974	2,310,000	3,920,000	728,000	191,000	5,520,000	57.10	189	21,100,000
1975	1,900,000	3,440,000	740,000		4,640,000	74.60	226	24,700,000
1976	2,270,000	4,170,000	879,000	471,000	5,580,000	79.80	229	24,300,000
1977	2,230,000	4,610,000	865,000	467,000	5,990,000	79.00	213	25,200,000
1978	2,310,000	4,710,000	809,000	414,000	6,210,000	86.50 104	216 234	26,100,000
1979 1980	2,390,000	5,170,000	635,000	251,000	6,920,000			25,700,000
-	2,220,000		840,000			129 156	256 280	
1981 1982	1,910,000		491,000		6,210,000	136	247	27,100,000
1982	1,780,000 1,510,000	3,860,000 4,440,000	519,000 300,000		5,120,000 5,650,000	135	222	24,500,000 27,400,000
1984	1,640,000					135	212	29,300,000
1985	1,270,000	4,590,000	513,000	336,000	5,350,000	127	192	29,200,000
1986	1,150,000	4,210,000	547,000		4,840,000	110	164	28,800,000
1987	1,490,000	4,070,000	470,000		5,090,000	124	178	30,500,000
1988	1,430,000				5,260,000	164	226	31,800,000
1989	1,540,000		446,000		4,500,000	172	226	29,300,000
1990	1,720,000					132	164	27,500,000
1991	1,710,000	4,160,000	624,000		5,240,000	163	195	26,100,000
1992	1,770,000	4,250,000	663,000		5,350,000	171	198	23,900,000
1993	1,480,000	4,360,000	415,000		5,430,000	159	180	20,400,000
1994	1,470,000	4,800,000	464,000		5,810,000	159	175	23,100,000
1995	1,400,000	4,830,000	409,000		5,820,000	152	163	24,700,000
1996	1,430,000	4,950,000	481,000		5,900,000	146	152	23,900,000
1997	1,400,000	5,490,000	466,000	200,000	6,430,000	145	147	25,500,000

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	Reported	Reported	Reported	Reported	apparent	unit value	unit value	world
Year	production	imports	exports	stocks	consumption	(\$/t)	(98\$/t)	production
1998	1,300,000	4,780,000	477,000	300,000	5,600,000	174	174	26,000,000
1999	1,200,000	4,470,000	459,000	300,000	5,210,000	162	158	27,200,000
2000	1,200,000	4,610,000	367,000	301,000	5,600,000	155	147	27,000,000
2001	1,100,000	4,540,000	366,000		5,300,000	151	139	26,400,000
2002	1,200,000	4,620,000	371,000		5,300,000	164	149	26,500,000

Potash Worksheet Notes

Data Sources

Sources for the potash worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); and Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS). The years of publication and corresponding years of data coverage are listed in the References section below. Blank field values indicate that data are not available.

Reported Production

Potash production data are reported domestic sales data. All data are reported in terms of their K_2O equivalents. Except for the years 1900 and 1905, no sales data are available prior to 1915. Data are reported in the MR and the MYB.

Reported Imports

Potash imports, in terms of their K₂O equivalents, are reported for the years 1900–2002. Data are reported in the MR and the MYB.

Reported Exports

Potash export data are not available for the years 1900-22 and 1926-36. Potash exports for the years 1923-25 are reported as the K_2O equivalents of potassium salts and potash fertilizers. For the years 1937-77, potash exports are reported as the K_2O equivalents of potash chemicals and fertilizers. Potash export data for the years 1978-2002 are reported in terms of K_2O equivalents, but do not include potassium salts and mixed fertilizers export data. Data are reported in the MR and the MYB.

Reported Stocks

Data are yearend producer stocks. Stocks data are not used in the apparent consumption equation. Potash stock data are not available for the years prior to 1918 and for 1919. Data for the years 1918 and 1920-77 are reported in the MR and MYB. Data for the years 1978–99 are reported in the MCS. Data for the years 2001–02 are not available.

Estimated or Reported Apparent Consumption

The significant drop in apparent consumption from 1915–21 was a result of an embargo against imports from Germany. Domestic apparent consumption data for the years 1900–23 are calculated using the following equation:

APPARENT CONSUMPTION = DOMESTIC SALES + IMPORTS – EXPORTS.

For the years 1924–2002, published apparent consumption data are used. Data are reported in the MR and the MYB.

Estimated Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of potash (K_2O equivalents) apparent consumption. For the years 1900–23, 1928–30, and 1937–2002 the unit value data are calculated using the following equation:

 $\mbox{UNIT VALUE} = (\mbox{DOMESTIC SALES VALUE} + \mbox{IMPORT VALUE} - \mbox{EXPORT VALUE}) \, / \, (\mbox{DOMESTIC SALES TONS} + \mbox{IMPORT TONS}).$

Unit Value data for the years 1924–27 and 1931–36 are calculated using the following equation:

UNIT VALUE = APPARENT CONSUMPTION VALUE / APPARENT CONSUMPTION TONS.

The significant rise in unit value from 1915–21 was a result of an embargo against imports from Germany, coupled with high demand. Data are reported in the MR and the MYB.

Estimated Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Reported World Production

Potash world mine production data are reported in terms of K_2O equivalents. Potash world production data are not available for the years prior to 1919. Data are reported in the MR and the MYB.

References

- U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.
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